

In re Application of
Miyata and Kurokawa
Application No.: Not yet assigned
Filed: April 2, 2002
Based on International Appl. No. PCT/JP00/06987
International Filing Date: 6 October 2000
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PATENT
Attorney Docket No.: SHIM1130

7 8. The carrier of claim 3, wherein the shape of the carrier is selected from the group consisting of: membranous, fibrous, granular-shaped, hollow fiber-like, non-woven fabric-like, porous, and honeycomb-shaped carrier.

8 9. The carrier of claim 3, wherein the carrier has a body fluid contact area that can be controlled by changing: thickness, surface area, diameter, length, shape, and/or size of the carrier.

9 10. The carrier of claim 3, wherein the carrier is a hemodialysis membrane.

10 11. The carrier of claim 3, wherein the biguanide agent is immobilized on the carrier by physical adsorption, a specific biochemical binding reaction, ion binding, covalent bonding, or grafting.

11 12. An adsorbent of carbonyl compounds comprising any of the carriers of claim 3 to 8.

12 13. A peritoneal dialysate solution comprising the carbonyl stress-decreasing agent of claim 1.

13 14. A method for removing carbonyl compounds comprising the step of contacting the carrier of claim 3 with a body fluid selected from the group consisting of: blood, blood plasma and peritoneal dialysate.

14 15. The method of claim 11, wherein the removal of the carbonyl compounds are carried out during in vivo or ex vivo blood purification step.

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A 13. ¹⁴ The method of claim 12, wherein the blood purification step comprises one or more steps selected from the group consisting of: hemodialysis, blood filtration, blood filtration dialysis, blood adsorption, and blood plasma separation.

In the Description

Page 4 line 1 to line 12, please change as follows:

[1] a carbonyl stress-decreasing agent comprising a biguanide agent or pharmacologically acceptable salt thereof as an active ingredient;

[2] the carbonyl stress-decreasing agent of [1], wherein the biguanide agent is a compound selected from the group consisting of: phenformin, metformin, buformin, and pharmacologically acceptable salts thereof;

[3] a carrier, on which a biguanide agent has been immobilized;

W [4] the carrier of [3], wherein the carrier is selected from the group consisting of: synthetic or naturally-occurring organic macro-molecular compounds; inorganic materials, such as glass beads, silica gel, alumina, and activated charcoal; and materials coated with polysaccharide(s) or synthetic polymer(s) thereof;

[5] the carrier of [3], wherein the shape of the carrier is selected from the group consisting of: membranous, fibrous, granular-shaped, hollow fiber-like, non-woven fabric-like, porous, and honeycomb-shaped carrier;

[6] the carrier of [3], wherein the carrier has a body fluid contact area that can be controlled by changing: thickness, surface area, diameter, length, shape, and/or size of the carrier;

[7] the carrier of [3], wherein the carrier is a hemodialysis membrane;

[8] the carrier of [3], wherein the biguanide agent is immobilized on the carrier by physical adsorption, a specific biochemical binding reaction, ion binding, covalent bonding, or grafting;